



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE CONSERVATION OF SPIRIT AND THE ORIGIN OF CONSCIOUSNESS.

THE consideration of the relation that subsists between body and mind is a topic that has led to several theories, one of which has found favor with many on account of its supposed monistic implications. Dr. Carus in his work "The Soul of Man" seems to adopt that theory, and his method of explaining the matter is one of notable superiority. He says :

"Matter and mind (the elements of feeling) are to be considered as one—not the same, but one. They are as inseparable as are the two sides of a sheet of paper. If we look at it from the mind side its activity represents itself as elements of feeling and all kinds and degrees of actual feelings. If we look at it from the matter side its activity represents itself as motions or as all kinds of potential and kinetic energy."

This doctrine of a double-faced unity has no doubt been favored because it has seemed the best and perhaps the only refuge available against the various forms of dualism. Still this same doctrine is very far from inducing that final pacification of mind which we rightly expect from a competent theory. It is open to the charge of being arbitrary, and it brings no access of insight.

The expressions of those whom we must suppose to be well affected towards any doctrine that gives promise of a monistic issue show this to be the case. Thus Tyndall says :

"I do not think that he (i. e. the materialist) is entitled to say that his molecular groupings and his molecular motions explain everything. In reality they explain nothing. The utmost that he can affirm is the association of two classes of phenomena of whose real bond of union he is in absolute ignorance. *The problem*

of the connection of body and soul is as insoluble in its modern form as it was in the prehistoric ages."

And Huxley protests that,

"How anything so remarkable as a state of consciousness comes about as a result of irritating nervous tissue is *just as unaccountable* as the appearance of the Djinn when Alladin rubbed his lamp."

In truth those who might be expected to speak with considerable reserve in regard to the inabilities of human attainment have emphasised without due sobriety the insuperable aspects of the problem. The past history of culture should have counseled caution, especially in view of the certainty that consciousness is *some-how* dependent upon nerve action.

It is submitted that the recent progress of science should induce a hopeful temper of mind on this question. Not only have physiology and psychology brought to light more results in the last decades than in centuries past, but in positive monism and formal thought philosophy has also attained to a clearness of method which will prove beneficial to all special investigations. A clear and concise statement of the new positivism is found in the chapter Form and Formal Thought of "Fundamental Problems" by Dr. Carus. Any one who has watched the development of the algebra of thought and the philosophy of logic, will naturally expect signal aid towards the solution of the world-questions from a proper consideration of form and the laws of form. In Dr. Carus's book and especially in the above mentioned chapter will be found a most popular exposition of that subject.

Those who hold that form and formal thought is the very constituted means by which our information with respect to real existence may be improved, ought to regard it a decided step towards the solution of any hitherto apparently inexplicable problem, if we only but find ourselves able to *formulate* an idea or process that mediates between the known and the unknown, and represents to our insight how it is possible to think of a phenomenon in accordance with notions that yield perceptible imagery.

Riemann in what has been well characterised as his "stu-

pendous" essay on "The hypotheses that lie at the basis of geometry" remarks :

"We are quite at liberty to suppose that the metric relations of space in the infinitely small do not conform to the hypotheses of geometry ; *and we ought in fact to suppose it if we can thereby obtain a simpler explanation of phenomena.*"

So also Jevons in his "Principles of Science" commenting on "The Character of the Experimentalist" refers to the audacity of speculation that characterised Faraday and that was the leading of his efforts towards some of his most brilliant discoveries. He says :

"We have only to notice the profound conviction in the unity of natural laws, the active powers of inference and imagination, *the unbounded license of theorising.*"

Theory must precede experiment. We must formulate before we can verify. The words of Faraday: "Let us encourage ourselves by a little more imagination prior to experiment," shows us the method he followed.

Recent developments in connection with the study of electricity supply us with at least an analogy that may instruct us as to how we may *suppose* the appearance of consciousness as a result of nerve action.

The nature of electricity has long been an unformulated thesis. That it may be produced by the motion of matter is proved by every dynamo in operation : indeed the oldest experiments in static electricity are to the same effect.

At the present time it seems to be an acceptable doctrine or at least a good working hypothesis that electricity and magnetism are manifestations of that once hypothetical medium called *the ether*.

Prof. G. F. Fitzgerald in his opening address before Section A of the British Association for the Advancement of Science in 1888 made these very important remarks :

"In a presidential address on the borderlands of the known, delivered from this chair, the great Clerk Maxwell spoke of it as an undecided question whether electro magnetic phenomena are due to direct action at a distance or are due to the action of an intervening medium. The year 1888 will ever be memorable as the year in which this great question has been experimentally *settled* by Hertz in Germany. Henceforth I hope no learner will fail to be impressed with the theory—*hypothesis no longer*—that electro-magnetic actions are due to a medium pervading all known space."

That the ether really exists : that it is a proved fact and that it is the substantial basis out of which electricity and magnetism arises, are pretensions too momentous to remain unchallenged if they lacked good evidence in their favor. Yet instead of awakening dissent among the critical hosts of science, these utterances of Professor Fitzgerald have not only been received as voicing the convictions of the scientific world but they are confirmed from time to time by the sometimes tacit and sometimes express assent of all who discourse upon the matters involved.

Prof. Oliver Lodge, one of the leading scientific men of England and an acknowledged authority upon the subject has recently published a work entitled "Modern Views of Electricity." In his preface he says :

"Few things in physical science appear to me more certain than that what has so long been called electricity is a form or rather a mode of manifestation of the ether."

He supposes the ether as a compound of two constituents corresponding to positive and negative electricity. Each of these constituents has affinities, cohesions, or entanglements with the various kinds of matter, which affinities, cohesions, or entanglements are greater or less according to the kind of matter involved, so that by the motions of certain sorts of matter under proper conditions the two constituents of the ether are torn apart or separated, or in the language of dynamics, strained. But at the same time these constituents also tend with unceasing persistence to reunite and saturate one another into a state of absolute neutrality. Separate, these constituents show an existence and an energy towards one another. United neither of them shows any existence at all nor any efficacy whatever. They are as though they did not exist.

It is of small moment to the present purpose whether or not this electrical theory is well grounded. In either case its very formulation supplies us with a suggestion as to how it is possible to think of consciousness as a product of nerve action.

Just as the ether is supposed as the substantial basis out of which in consequence of the motion of matter electricity and magnetism becomes manifest, so may we suppose an analogous (per-

haps the same) basis surrounding and permeating all things, and out of which in consequence of nerve action, consciousness becomes manifest.

Why may we not suppose this consciousness basis, (which suppose we name spirit,) to be the ultimate substance which being variously modified by energy manifests in one case the phenomena of mind, in another the phenomena of electricity, magnetism, etc., and then again in a third case that phenomenon, mass, or inertia, which is the essential attribute of matter?

As with the ether in the absence of any cause that separates it so that electricity and magnetism become manifest, so spirit may be supposed to be utterly without manifestation and neutral until nerve action modifies its condition, when like electricity in the one case, so here, consciousness becomes manifest.

Why may we not imagine spirit as composed of two constituents corresponding to feeling and volition which united saturate one another into neutrality, but which separated by nerve action manifest feeling that tends to pass into volition, or volition that tends to pass into feeling? This would be in accordance with the phenomena of reflex action which is supposed to be the elementary type of mentality.

This is in harmony with the views of the author of "The Soul of Man," for he, although for other reasons, also explains the origin of consciousness from tension. He says :

"Consciousness is an intensified state of feeling caused through tension. It lies between a want and its satisfaction. Satisfaction not being immediately attainable, feelings are no longer in a state of equilibrium, and it is this tension which concentrates and intensifies feeling into consciousness.

"It appears that consciousness never arises without a certain tension. Days spent in an idyllic life flow away almost unconsciously ; there is little friction, there are no problems to be solved ; there are no unsatisfied wants, or if there are any, they are quickly and easily attended to. There is no need of consciousness, there is not much tension to call it into play, so life passes dreamlike as a tale that is told. The more life is burdened with problems that demand a man's full care and deliberation, and the stronger are his attempts to solve the problems of his situation, the more intense will his consciousness be.

"It appears to me very doubtful whether conscious beings could exist in a world—if such a world were possible at all—where the struggle for existence was

unknown ; for it is the struggle for existence that presents the first and most imperative problems to living and feeling beings."

Spirit or the elementary basis of consciousness considered as a quantity, would on this supposition remain the same, but the forms of its manifestations would change. There would be more or less straining of spirit and accordingly more or less manifestation of consciousness. Or to formulate it in one sentence, we would have to postulate *the conservation of spirit*.

Such a supposition or some similar supposition if tolerable would bring our ideas into some sort of accord with scientific customs of explanation, and would, extricate our minds from that state of utter stultification into which they are cast whenever they are confronted with the relations of body and mind.

FRANCIS C. RUSSELL.